Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Reorganization and Revision of	)	WT Docket No. 94-148
Parts 1, 2, 21, and 94 of	)	
the Rules to Establish a New	)	
Part 101 Governing Terrestrial	)	
Microwave Fixed Radio Services	)	
	)	
Amendment of Part 21 of the	)	CC Docket No. 93-2
Commission's Rules for the Domestic	)	
Public Fixed Radio Services	)	
	)	
McCaw Cellular Communications, Inc.	)	RM-7861
Petition for Rulemaking	)	

REPORT AND ORDER

Adopted: February 8, 1996 **Released: February 29, 1996**

By the Commission:

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I. INTRODUCTION

1. On December 9, 1994, we adopted a Notice of Proposed Rule Making (Notice) in WT Docket No. 94-148. The Notice proposed simplifying the rules for the common carrier

and private operational fixed microwave services, currently contained in Parts 21 and 94 of the Commission's Rules[1] respectively, and to consolidate those rules into a new Part 101.[2] In a separate proceeding, Notice of Proposed Rule Making in CC Docket No. 93-2 (Point-to-Point Notice), we proposed revising Part 21 to allow common carrier microwave applicants to commence construction of proposed facilities prior to the grant of authorizations and to eliminate certain reporting requirements.[3] Because the proposals outlined in the Point-to-Point Notice concern Part 21 microwave operations which we are consolidating in Part 101, we are addressing both proceedings together. As discussed below, we are adopting most of the proposals presented in the above proceedings. Creating one comprehensive new rule part for these microwave services and eliminating undue regulatory burdens will result in significant benefits for both the public and the Commission.[4]

II. BACKGROUND

2. Communication services that use the microwave spectrum for fixed services include common carriers (currently regulated by Part 21), common carrier multiple address systems (Part 22), broadcasters (Part 74), cable TV operators (Part 78), and private operational fixed users (currently regulated by Part 94). The radio frequency spectrum is allocated among these services on either a shared or exclusive basis. Of these services, the common carrier and private operational fixed microwave users are the most similar in technical requirements and share the most frequency bands. The convergence of the common carrier and private operational fixed microwave technical standards occurred over the last decade as a result of

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[1] 47 C.F.R. Parts 21 and 94.

[2] Reorganization and Revision of Parts 1, 2, 21, and 94 of the Rules to Establish a New Part 101 Governing Terrestrial Microwave Fixed Radio Services, WT Docket No. 94-148, FCC 94-314, Notice of Proposed Rule Making, 10 FCC Rcd 2508 (1994).

[3] Amendment of Part 21 of the Commission's Rules for the Domestic Public Fixed Radio Services, CC Docket No. 93-2, Notice of Proposed Rule Making, 8 FCC Rcd 1112 (1993). In addition, we note that in the context of this proceeding, a Petition for Rulemaking (RM-7861) filed by McCaw Cellular Communications, Inc., proposing to revise Part 21 to allow Point-to-Point microwave applicants to obtain permanent authorization using procedures reserved for obtaining authorization for facilities at temporary-fixed locations was also addressed. This Petition for Rulemaking is discussed and denied in this proceeding. See infra paragraphs 24 and 90.

[4] The Common Carrier Microwave Radio Services include the Point-to-Point Microwave Service (Subpart I), the Digital Electronic Message Service (Subpart G), and the Local Television Transmission Service (Subpart J). The Multipoint Distribution Service (MDS), also included in Part 21 (Subpart K), is unaffected by this proceeding. Common carrier and non-common carrier MDS licensees and applicants will continue to be subject to the current MDS rules and application filing procedures.

several rulemaking proceedings.[5] A further convergence of these services occurred as a result of the reallocation of five bands above 3 GHz on a co-primary basis to common carrier and private operational fixed microwave licensees that are relocating from the 1850-1990, 2110-2150, and 2160-2200 MHz bands (2 GHz bands) to accommodate Personal Communications Services (PCS) and other emerging technologies.[6]

3. Also, as a result of the emerging technologies spectrum reallocation and the resulting increase in frequency band-sharing, common carrier and private microwave industry members united to develop joint interference standards and coordination procedures. A subcommittee of the Telecommunications Industry Association's Fixed Point-to-Point Microwave Engineering Committee (TIA TR14.11 Interference Criteria Engineering Subcommittee) held joint meetings with the National Spectrum Managers Association (NSMA), a group of frequency coordinators for Part 21 applicants, to determine interference criteria for Part 21 and Part 94 users. This collaboration resulted in a revised TIA Telecommunications Systems Bulletin TSB 10-F, "Interference Criteria for Microwave Systems," (TSB 10-F) which was adopted by the microwave industry on May 31, 1994.

4. Consolidation of these services is also appropriate because the majority of the license application processing for the Part 21 and Part 94 microwave services is now performed by the Wireless Telecommunications Bureau's Licensing Division in Gettysburg, Pennsylvania. Previously, the application processing for these services was performed by different Commission offices, which maintained separate processing practices and policies. Consolidation will bring uniformity to the fixed microwave application processing procedures.

5. For these reasons, we proposed to reorganize and revise Parts 21 and 94 of the rules to establish a new Part 101. At the same time, we proposed eliminating unnecessary and out-dated rules and reducing regulatory burdens. We anticipated that the new consolidated Part 101 would result in a number of major benefits. First, the public would benefit from simplified and streamlined rules. Second, both the public and the Commission would benefit from reduced regulatory burdens. Third, the proposed rules would encourage more efficient use of the microwave spectrum by permitting more intensive use of microwave equipment. Fourth, common technical standards for common carrier and private operational fixed microwave equipment would lead to economies of scale in microwave equipment

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[5] See First Report and Order, PR Docket No. 79-337, 81 FCC 2d 140 (1980); Second Report and Order, Gen Docket No. 79-188, 48 Fed. Reg. 50322 (1983); First Report and Order, PR Docket No. 83-426, 50 Fed. Reg. 13338 (1985); Third Report and Order, Gen Docket No. 82-334, 2 FCC Rcd 1050 (1987); and First Report and Order, Gen Docket No. 82-243, 6 FCC Rcd 4320 (1991).

[6] See Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, ET Docket No. 92-9, Second Report and Order, 8 FCC Rcd 6495 (1993) (Emerging Technologies Second Report and Order).

production and lower equipment prices to licensees. Moreover, private and common carrier microwave systems are often technically and operationally similar, but are now subject to differing regulation depending on whether an applicant files under Part 94 or Part 21 of the Commission's rules. The new consolidated Part 101 will eliminate this arbitrary distinction and further regulatory symmetry between common carrier and private operational fixed microwave services. The Point-to-Point Notice also proposed eliminating unnecessary regulations and reducing burdens under Part 21.

6. The parties that filed comments and reply comments in response to these two proceedings are listed in Appendices C and D.[7] The parties overwhelmingly support the Commission's efforts to streamline, update, and simplify the rules for the common carrier and private operational fixed services. While we have reviewed all of the suggested changes carefully, we discuss below only the major issues raised. Many of the minor suggestions have been incorporated directly into the final rules without textual discussion.[8]

III. MAJOR ISSUES

A. Applications and Licenses

7. Elimination of Public Interest and Other Showings. The Notice in WT Docket No. 94-148 proposed eliminating several application showings currently required of common carrier microwave applicants under Part 21 of the rules. Specifically, we proposed eliminating the following: (1) the financial showing required under Sections 21.13(a)(2) and 21.17; (2) the public interest showing required under Section 21.13(a)(4); (3) the requirement that applicants submit a copy of any franchise or other authorization when such authorizations are required by local law, pursuant to Section 21.13(f); (4) the showings regarding the management and operation of the station and maintenance procedures including the address and telephone number of a maintenance person, as required by Sections 21.13(g) and 21.15(e); (5) the vertical profile sketch, as required by Section 21.15(c), the site availability showing of Section 21.15(a); (6) the public interest showing required for applicants in the Point-to-Point Microwave Radio Service, pursuant to Section 21.706(a); and (7) posting of station authorization information, as required by Section 21.201.

8. Comments. The commenters overwhelmingly support our initiative to reduce regulatory burdens and agree that providing much of the requested information is unnecessary and burdensome.[9] Some commenters, however, oppose the elimination of the requirement to

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[7] Comments filed in response to the Notice are listed in Appendix C, and comments filed in response to the Point-to-Point Notice are listed in Appendix D.

[8] See attached Appendix A.

[9] See, e.g., Digital Microwave Corporation Comments at 3-4; E.F. Johnson Company Comments at 2-3; Nynex Comments at 1-2.

file the address and telephone number of a maintenance center or person responsible for technical operation, because they believe such information is important in the event of interference and for other official purposes.[10] All of the commenters addressing the issue of license posting requirements recommend that the Commission retain the existing rule, noting that it is a minimally burdensome requirement which helps to maintain adequate station records, ensures that facilities are operating within the parameters of the station authorization, and assists parties in identifying the licensee of a station when seeking to resolve interference problems.[11] Telecomm Services Group also expresses concern regarding the elimination of the public interest provisions found in 47 C.F. R. Sections 21.13(a)(4) and 21.706(a) and (b).[12]

9. Discussion. Based on the comments, we are eliminating several application showings required of common carrier microwave applicants under Part 21 of the rules. More specifically, we will no longer require applicants to file with their initial application a (1) financial showing, (2) public interest statement, (3) local franchise authorization, (4) vertical profile sketch, or (5) site availability showing. At the time the Commission imposed these requirements, they were used in monitoring carriers' investments and operations. Today, however, we rely on competition and market forces to influence common carriers' market decisions, and depend less on such detailed information from the carriers. Accordingly, these showings now are unnecessary for license grant. Further, eliminating these undue burdens will save time, effort and money for applicants, licensees and the Commission. We note, however, that the Commission has the authority to require an applicant to file any of the above information, where it finds that such information is necessary.[13] While we no longer will require a specific public interest statement, we note that all the information on the initial application form and any associated filings, will be used to make a public interest determination. As requested by the commenters, and for the reason stated in paragraph 8, we will continue to require licensees to post station authorizations at their facilities[14] and to require applicants to file the address and telephone number of a point-of-contact or person responsible for technical operation.[15]

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[10] See, e.g., American Petroleum Institute Comments at 7; Telephone and Data Systems, Inc. Comments at 2.

[11] Alltel Mobile Corporation Comments at 7; UTC Comments at 16; Digital Microwave Corporation Comments at 5.

[12] Telecomm Services Group, Inc. Comments at 2-5.

[13] See Section 101.19.

[14] See Section 101.215.

[15] See Section 101.21(c).

10. Consummation of Assignments and Transfers. Currently, Part 21 requires common carrier applicants to complete assignments or transfers of control within 45 days of the date of authorization, and to notify the Commission within ten (10) days of consummation.[16] Applicants, however, frequently request extensions of time to complete assignments or transfers. We requested comment on whether the time for consummation of assignments and transfers should be extended or whether applicants should be allowed merely to notify the Commission of failure to consummate, rather than requiring applicants to file, and the Commission to grant, repeated extension requests.[17] We also proposed to eliminate the requirement for common carriers to notify the Commission within 10 days of consummation.[18]

11. Comments. Many of the commenters favor extending the period of time permitted for the consummation of an assignment or transfer of control.[19] There is disagreement, however, on the amount of time that should be required for the consummation. Airtouch supports extending the time for consummation of an assignment or transfer to 360 days, stating that this time frame allows more than sufficient time for consummation and eliminates the need for extension requests and the associated burdens on carriers and the Commission.[20] Other commenters, such as Alltel and GTE, believe that the current 45-day consummation period should be extended to 60 days, as 360 days may be unnecessarily long and may increase the difficulty of licensees complying with Commission notification requirements.[21] Telephone and Data Systems, Inc. supports a 180-day period for consummation.[22] Also, several parties address the issue of eliminating the notification requirement.[23] Alltel contends that notification of consummation is a minimal burden which serves to avoid confusion as to whether a transaction has been completed.[24] GTE and Bellsouth contend that it is an unnecessary burden, and that parties should be required to

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[16] See Section 21.11(d), (e), and (f).

[17] See Notice at para. 12.

[18] See Notice at para. 12.

[19] See, e.g., Alltel Comments at 3; Nynex Comments at 3; Telephone and Data Systems, Inc. Comments at 3.

[20] Airtouch Comments at 11.

[21] AllTel Comments at 3; GTE Comments at 6.

[22] Telephone and Data Systems, Inc. Comments at 3-4.

[23] Alltel Comments at 4; GTE Comments at 7; BellSouth Comments at 4-5.

[24] Alltel Comments at 4.

notify the Commission only if the transfer or assignment is not completed.[25]

12. Discussion. Based on our experience in the private operational fixed service, we will conform the period for consummation of assignment and transfer for common carrier licensees to that of private operational fixed licensees. Under existing Part 94, private operational fixed service entities are not subject to any time limitation for consummating an assignment or transfer of control.[26] Eliminating the period for consummation of assignments or transfers should satisfy the concerns of the commenters and avoid the numerous extension requests filed with the Commission each year. We believe that conforming common carrier consummation procedures with private operational fixed service procedures will reduce administrative burdens and carriers costs. We see no public benefit in extending the period to 60 days or more, as such a measure would not avoid processing burdens, and would invite requests for extensions of time as does the existing 45 day period. Consistent with eliminating the consummation period, we eliminate the requirement for common carriers to notify the Commission within 10 days of consummation. Given that applicants will have no time constraints to complete these transactions, we will presume that a consummation of an assignment or transfer will occur and the Commission's database will be updated to reflect the consummation when the application is granted. To avoid database inaccuracies and to alleviate commenters' concerns, we will require both common carrier and private operational fixed service licensees who fail to consummate, to modify their licenses accordingly within 30 days of a failure to consummate. See Sections 101.13 and 101.15.

13. Application Forms. FCC Form 430 (Licensee Qualification Report). In the Point-to-Point Notice, we proposed eliminating the requirement that Part 21 licensees and applicants report licensee qualification information on a separate FCC Form 430, and instead proposed that such information be included in a revised FCC Form 494 (Application for New or Modified Microwave Radio Station License under Part 21).[27]

14. FCC Form 494A. To streamline the reporting requirements for applicants, to reduce redundancy, and to decrease administrative burdens, we proposed eliminating the requirement that common carrier applicants file an FCC Form 494A upon completion of construction.[28] We stated that we had not found the information provided on this form to be

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[25] GTE Comments at 7; Bellsouth Comments at 4.

[26] Also, private operational fixed service licensees are not required to file notice of consummation. Only in the case of failure to consummate are they required to give notice by filing an appropriate modification application to return an authorization to the initial licensee.

[27] Point-to-Point Notice at para. 18.

[28] Point-to-Point Notice at para. 15.

essential to processing these applications, and that existing rules[29] should provide sufficient enforcement mechanisms for dealing with applicants who fail to construct or operate their facilities as required. We also asked whether eliminating the filing of the FCC Form 494A would leave the public without adequate notice of which common carrier facilities had actually been constructed. or would result in warehousing of frequencies due to failure to construct.

15. FCC Forms 702 and 704. In addition, in the Point-to-Point Notice we proposed consolidating FCC Forms 702 ("Application for Consent to Assignment of Radio Station Construction Authorization or License") and FCC Form 704 ("Application for Consent to Transfer of Control") into a new FCC Form 705 ("Application for Assignment or Transfer of Control Under Part 21") to streamline reporting requirements related to assignments or transfers of control.

16. Comments. Several commenters in the Point-to-Point Notice support our proposal to eliminate the FCC Form 430 requirement.[30] Others, however, express concern that they would have to repeat ownership information, or other voluminous licensee qualification information every time they applied for a new or modified facility.[31] The issue of application forms was also addressed in comments to the WT Docket No. 94-148 proceeding. For example, AirTouch asks that the Commission eliminate the annual FCC Form 430 filing requirement for common carrier licensees, contained in Section 101.15(h).[32] Commenters also support eliminating the Form 494A filing requirement. Nynex, for example, states that the information contained on FCC Form 494A and the public notice, reflecting the filing of the 494A, is redundant and unnecessary and that the Commission should only require the licensee to submit a letter of notification certifying completion of construction and activation of the facility.[33] Some commenters, however, express concern about maintaining the accuracy of the databases used for frequency coordination, should the 494A be eliminated.[34] All commenters addressing the issue of developing one application form to reflect either an assignment or

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[29] See Sections 21.43, 21.44, and 21.303(d).

[30] See, e.g., Nynex Comments at 3; OCOM Corporation Comments at 2; Sprint Corporation Comments at 2.

[31] See, e.g., GTE Comments at 7; MCI Comments at 4.

[32] Airtouch Comments at 13.

[33] Nynex Comments at 3.

[34] See, e.g., Comsearch Comments at 4; MCI Comments at 3.

transfer of control, support consolidating FCC Forms 702 and 704.[35] Finally, commenters suggest the adoption of unified application forms for use by the common carrier and private operational fixed microwave services, as an additional means of streamlining the application and licensing process (i.e., consolidation of the Part 21 Form 494 and Part 94 Form 402).[36]

17. Discussion. We are eliminating use of the Form 430 for common carrier microwave facilities licensed under Part 101. The essential ownership information we receive via this form will be incorporated into the Form 494 replacement. To allay commenters' concerns that they will be required to repeat ownership data each time they file an application for construction authority, the replacement form will require the submission of this information only in those instances requiring an update of the licensee qualification information or when an applicant establishes itself as a new common carrier. To further reduce applicants' filing burdens, we are eliminating the requirement to file a Form 494A, certifying completion of construction for these entities as well. The information provided on this form is not essential to granting a license. The existing rules provide sufficient enforcement mechanisms for dealing with applicants who fail to construct or operate as required.[37] To alleviate concerns about maintaining the accuracy of the data base, we will list licensees who lose their licenses for failure to construct on a public notice. We also are eliminating the Forms 702 and 704 for common carrier entities subject to new Part 101. However, we will defer implementing this decision until the new unified application forms are completed. We are developing a unified application form for both common carrier and private operational fixed microwave services and a new Form 705 as a replacement for the 702 and 704 forms. In the interim applicants and licensees should continue to use these existing forms. We will notify the public by public notice when the new forms supersedes use of Forms 494, 702, and 704.

18. License Term/Authorization Renewals. Currently licenses are issued for a period of five years under Part 94 and up to ten years under Part 21. Part 21 also specifies the date on which expiration of the authorization will occur. For example, licenses for Point-to-Point Microwave Radio Service, Local Television Transmission Service, and Digital Electronic Message Service expire on February 1.[38] In the Notice, we proposed that licenses be issued

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[35] See, e.g., Local Area Telecommunication, Inc. Comments at 5; Sprint Corporation Comments at 4.

[36] Joint Comments of National Spectrum Managers Association, Inc. (NSMA) and Fixed Point-to-Point Communications Section, Network Equipment Division of the Telecommunications Industry Association (TIA) at 11; UTC Comments at 4.

[37] See supra note 30.

[38] See Section 21.45.

for a period not to exceed ten years from date of grant.[39]

19. Comments. The commenters support a ten-year license term. Some commenters, however, argue that failure to include specific expiration dates for the microwave services causes confusion for renewal filings, as the "date of grant" is not always evident, and even where clearly evident, the new rule will require licensees to file perhaps hundreds of separate renewals on a staggered basis.[40] GTE states that Section 101.67, as proposed, will present serious logistic and monitoring problems for companies that hold hundreds of microwave licenses.[41]

20. Discussion. We are adopting a ten-year license term for all Part 101 licensees.[42] A ten-year license term eliminates unnecessary paperwork for the Commission as well as the public. Further, it makes the licensing term consistent between the common carrier and private operational fixed services. As proposed, authorizations will be issued for a period of ten years from the date of original issuance, modification, or renewal. Licensees will have the discretion to select a date (month and day) that their licenses will expire. In no event will the license period exceed ten years. A term of less than ten years may be applied to permit the orderly scheduling of renewal applications.[43] Under this rule, concerns regarding monitoring burdens should be abated, as licensees will be able to prepare consolidated renewal application filings. This revised license renewal schedule will become effective on August 1, 1996.

21. Electronic Filings. In the Notice, we proposed to allow electronic filing for all fixed microwave services authorized under Part 101.[44] Modification of the handwritten

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[39] See Section 101.67.

[40] AirTouch Comments at 6.

[41] GTE Comments at 10.

[42] See Section 101.67(a).

[43] For example, if a licensee elects an annual renewal date of October 1, any license granted between October 2, 1996, and September 30, 1997, would bear an expiration date of October 1, 2005, to preclude extending the term of these authorizations beyond ten years.

[44] The Notice specifically proposed amending Section 1.743, as the common carrier services did not have a provision permitting electronic filing. We note that Section 1.913, specifically relating to private radio services, already allows for the filing of applications in this manner, as this rule section was amended to delete the word "personally" from the application signature requirement. In the Matter of Amendment of the Commission's Rules to Modify Signature Requirement for License Applications in the Private Radio Services, 8 FCC Rcd 2662 (1993)(Signature Requirement Order). The amended signature requirement gave the Bureau discretion to establish filing procedures by public notice that would allow

signature requirement appeared to allow more efficient processing of applications in these services.

22. Comments. Generally, commenters support adopting electronic filing for fixed microwave services.[45] Some commenters, however, express concern regarding the costs of electronic filing and accessibility to computer equipment. Specifically, Rural Common Carrier Microwave Coalition and Pepper and Corazzini argue that small businesses may not have access to the technology necessary to complete and submit an electronic filing.[46]

23. Discussion. The rules already provide for electronic filing for private operational fixed applicants. Further, we have since amended the rules to allow electronic filing by all common carrier applicants.[47] Therefore, no action on this issue is necessary. Procedures for electronic filing in both the common carrier and private operational fixed services will be implemented by Public Notices appearing in the Federal Register. Upon implementation of electronic filing procedures, we plan to provide applicants and licensees computer software and technical support in order to facilitate a smooth transition to a paperless process. With respect to the issue of continuing to allow paper filings, we note that while our ultimate goal is to eliminate, to the greatest extent possible, the filing of paper applications, we will permit applicants to file either electronically or by paper until May 31, 1999. This option will accommodate those applicants who may have difficulty converting to an electronic filing process in the near future and provide sufficient time to resolve any unforeseen problems that may arise.

B. Operational Requirements

24. Pre-authorization Construction and Conditional Licensing. Currently, private operational fixed applicants can construct point-to-point microwave facilities prior to receipt of an authorization. Common carrier applicants, on the other hand, must obtain an authorization prior to commencing construction and operation. The Point-to-Point Notice proposed allowing applicants to begin construction of facilities after filing an FCC Form 494 ("Application for a New or Modified Microwave Radio Station License Under Part 21"), but prior to receiving a Commission authorization, as long as certain specified conditions were

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applications to be "signed" by computer-generated impulses. Section 1.913 is controlling with respect to all private radio services, governed by Parts 80, 87, 90, 95, 97, and formerly 94.

[45] Pepper & Corazzini L.L.P. Comments at 2-6; Rural Common Carrier Microwave Coalition Comments at 4.

[46] Rural Common Carrier Microwave Coalition Comments at 4.

[47] Revision of Part 22 of the Commission's Rules Governing the Public Mobile Service, CC Docket No. 92-115, CC Docket No. 94-46, CC Docket No. 93-116, Report and Order, 9 FCC Rcd 6513, 6521 (1994) (Part 22 Report and Order).

satisfied.[48] In addition, the Point-to-Point Notice discussed the issue of pre-authorization operation raised by McCaw Cellular Communications, Inc. In a Petition for Rulemaking (RM-7861), McCaw proposed that common carrier applicants be allowed to obtain permanent authorizations to construct and operate facilities through procedures used for authorizing temporary fixed facilities.[49] The Point-to-Point Notice listed a number of problems with McCaw's permanent pre-authorization operation plan and tentatively concluded that the public would be better served where staff processing and an initial notice and comment period take place prior to the commencement of operations.[50] It noted that McCaw's goal of expedited service could be achieved by allowing common carrier applicants to begin construction upon filing an FCC Form 494 application, and prior to grant of an authorization.

25. Comments. Most commenters support our proposal to allow pre-authorization construction, but also request authority for operation prior to final license grant.[51] They argue that the Commission should allow the microwave industry to operate as efficiently as possible and eliminate regulatory delays in bringing services to the marketplace. In addition, most commenters encourage the Commission to apply this concept to both common carrier and private operational fixed microwave licensees.[52]

26. Discussion. We agree with those parties who state that pre-authorization construction should be permitted. We will, however, carry our proposal one step farther. We are allowing common carriers to begin station construction, at their own risk, prior to receiving a license or filing a license application.[53] This will allow the microwave industry to operate more efficiently, as it will permit licensees to provide service in an expedited manner and will provide for greater flexibility in coordinating and consolidating construction projects. It also promotes regulatory parity in the treatment of private users and common carriers.

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[48] For example, these conditions included no mutually exclusive applications, no petitions to deny, and no requests for waiver of a Commission Rule. See Point-to-Point Notice at para 5.

[49] Under those procedures, common carrier applicants are issued a blanket license for various frequency bands in a particular geographic area. The holder of the license may then construct and operate temporary facilities, for less than 6 months, provided that the Commission is notified 5 days prior to installation of facilities.

[50] Point-to-Point Notice at para. 13.

[51] See, e.g., Local Area Telecommunications, Inc. Comments at 4-6; Airtouch Comments at 8.

[52] See, e.g., Airtouch Comments at 10; Association of American Railroads Reply Comments at 6.

[53] This pre-authorization construction is currently permitted under Part 94.

27. We also agree with those parties who state that operation prior to final license grant should be permitted. There are several benefits to allowing applicants to operate conditionally pending final license grant. First, it streamlines the administrative process. Currently, if applicants have a need to operate before they receive their final license, they must file a request for Special Temporary Authority (STA), in addition to the formal license application. By allowing conditional operation for all fixed microwave license applicants, the additional step of seeking an STA is eliminated. As a result, applicants who do not routinely file for STAs are permitted to begin operation more quickly. Second, it would protect the integrity of the Commission's STA process because it would eliminate the need to use STAs in more routine circumstances. Since we are adopting a conditional licensing process, we believe that the STA process should be limited to those circumstances where an applicant needs to operate at a site on a temporary basis or for other truly extraordinary circumstances.[54] We also believe that conditional licensing will allow the microwave industry to operate more efficiently, as it too will provide licensees greater flexibility in coordinating and consolidating construction projects.

28. Under this conditional licensing procedure, an applicant will be allowed to operate while its formal license application(s) is being processed provided that (1) it has successfully completed the frequency coordination process pursuant to Section 101.103(d) of the Commission's Rules; (2) the station's operation will have no significant environmental impact; (3) the application does not include a request for rule waiver and does not propose facilities within 56.3 kilometers of any international border or within a radio "Quiet Zone";[55] (4) the facilities do not require notification of proposed construction to the Federal Aviation Administration (FAA), or the facilities have been determined by FAA not to pose a hazard to aviation and they comply with Subpart B of Part 17 of the Commission's Rules; and (5) the station's operation is limited to point-to-point transmissions in the 4, 6, 10, 11, 18, and 23 GHz bands. Applicants will be required to certify that they have met these conditions. Once an applicant certifies to all conditions, operations may begin coincident with the filing of the formal application. Further, an applicant must cease such operation immediately upon notification by the Commission.

29. Although we are extending conditional licensing authority to both common carrier and private fixed microwave services generally, we conclude that such authority should not be available for operations in certain frequency bands. The 10.6-10.68 GHz, 17.7-19.7 GHz, and 21.2-23.6 GHz bands are allocated to both Government and non-Government users. As a result, licensing on these frequencies is subject to coordination between the Commission and the National Telecommunications and Information Administration (NTIA). Pending an agreement between the Commission and NTIA, we will not allow conditional licensing in the following frequency bands: (1) the 10.6-10.68 GHz band, (2) the 17.7-19.7 GHz band in the

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[54] See 47 C.F.R. §§ 21.25, 94.43 and 101.31

[55] See 47 C.F.R. § 101.123.

states of Colorado, Maryland, and Virginia, and the District of Columbia, and (3) the 21.2-23.6 GHz band for operations with an effective radiated power (E.R.P.) greater than 55 dBm.[56] We hereby delegate authority to the Wireless Telecommunications Bureau and Office of Engineering and Technology to modify the rule regarding conditional licensing, if appropriate, once the Commission and NTIA have reached an agreement regarding coordination of these frequencies.

30. This conditional license concept is not unique. For example, the Commission uses similar conditional licensing procedures in the Private Land Mobile Services.[57] We conclude that a conditional licensing procedure also is appropriate in the context of fixed microwave services. Section 301 of the Act requires that all persons using any apparatus for the transmission of signals by radio be licensed under the provisions of the Act. Section 309(a) requires the Commission to determine, "in the case of each application filed with it," whether the grant of such application will serve the public interest convenience and necessity. In addition, Section 303(r) provides that the Commission may prescribe such restrictions and conditions as may be necessary to carry out the provisions of the Act. The Act allows us to use our rule making authority to make generic public interest determinations regarding applications. Thus, by rule, we can conditionally authorize operations by granting applications subject to the condition of final Commission review. In this connection, we have on other occasions, enacted rules that provide for conditional operation of a radio station pending the final grant of the application. For example, in 1976, we amended our rules to permit applicants in the Citizens Band Radio Service to engage in temporary operation pending action on their applications.[58] We subsequently adopted a virtually identical procedure for ship stations in the Maritime Services.[59] These precedents provide support for our statutory authority to enact rules providing for conditionally granting such applications, where such procedures would advance significant public interest objectives.

31. Construction Period. Currently, the construction period under Part 21 is eighteen (18) months, and twelve (12) months under Part 94. The Notice proposed reducing the construction period for common carriers from the current 18 months to 12 months except for

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[56] See 47 C.F.R. § 101.147(s).

[57] See 47 C.F.R. § 90.159; see also Amendment of Part 90 of the Commission's Rules to Implement a Conditional Authorization Procedure for Proposed Private Land Mobile Radio Service Stations, PR Docket No. 88-567, (Part 90 Revision), 4 FCC Rcd 8280 (1989).

[58] See General Rules and Regulations, Citizens Radio Service, 41 Fed. Reg. 15849 (1976). In the Report and Order in PR Docket 82-799, the Commission eliminated individual licensing in this service. 48 Fed. Reg. 24884 (1983).

[59] Amendment of Part 1, 81, and 83 of the Commission's Rules to implement a system of temporary authorization for ship stations in the Maritime Services, 70 FCC 2d 863 (1979).

common carrier point-to-multipoint operations in the 10.6 GHz and 18 GHz bands.[60] This would expedite service to the public and make the general construction requirements for common carriers and private users consistent.

32. Comments. Most of the comments oppose the proposal to reduce the period for construction.[61] For example, GTE states that while it generally desires to place authorized facilities into operation as quickly as possible, the likely result of the proposed reduction in the point-to-point microwave construction period will be an increase in the number of requests for extension of time to complete construction.[62] UTC urges the Commission to conform the construction period for private operational fixed services licensees to the 18 months for which common carriers are currently permitted. TIA/NSMA also recommend adopting an 18-month construction period for all fixed point-to-point licensees, noting conditions beyond the licensee's control, often delay the actual period for construction by 6 months and that an additional 6 months is unlikely to have an adverse impact on the public interest.[63]

33. Discussion. The commenters have convinced us that an 18-month construction period is reasonable for facilities authorized under Part 101. We recognize that not every licensee will find it necessary to exercise the option of utilizing the pre-authorization construction procedure for expedited operation. An 18-month construction period takes into consideration the fact that some licensees may encounter unforeseen difficulties and delays in constructing facilities. Commenters note that fewer extension-of-time requests would be filed with an 18-month construction period. In addition, an 18-month construction period is consistent with our objective in this proceeding of providing for uniformity whenever possible between common carrier and private operations. We believe an 18-month construction period meets our objectives. Stations must be constructed within 18 months irrespective of whether the licensee is granted license modifications.

34. Definition of In Operation. In the Notice, we proposed to define clearly what constitutes the requirement for common carrier and private stations to be "in operation" (e.g., "constructed") within the specified construction period.[64] We proposed that only the transmission of operational signals is sufficient to satisfy the "in operation" requirement and

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[60] See Section 101.63.

[61] See, e.g., Association of American Railroads Reply Comments at 2; Airtouch Reply Comments at 2.

[62] GTE Comments at 9.

[63] TIA/NSMA Comments at 33.

[64] Notice at paras. 13-14.

that neither the capability of transmission nor the transmission of color bars[65] or similar test signals, satisfies the requirement to be "in operation."

35. Comments. Most commenters support the need for clarification of what satisfies the "in operation" requirement in the Commission's Rules.[66] Digital Microwave and Wincomm, Inc., however, raise a separate concern as to when operational traffic should be required to commence, arguing that once a licensee has undergone the effort and expense of constructing an authorized microwave facility, its license should not be subject to forfeiture simply because the station does not transmit operational traffic.[67] Wincomm, Inc., which is developing a nationwide network of Multiple Address Systems (MAS) for the purpose of providing a communications private carrier service, contends that the proposed definition reflects an outmoded view of the types of services offered by Commission licensees, and that the definition is overly restrictive to those licensees offering communications services to others.[68]

36. Discussion. The purpose of a construction requirement is to reduce the filing of speculative applications by entities that have no real intention of implementing communications systems and to avoid the potential for warehousing spectrum. Based on the record developed in this proceeding, we are defining "in operation" in terms that will provide licensees maximum flexibility to meet service demands and to fully utilize the assigned spectrum. We will consider a station authorized under this part to be "in operation" when construction is completed and the station is capable of providing service. After investing time and financial resources in installing such microwave facilities, we believe licensees will have sufficient incentive to deploy operational traffic as soon as possible. Thus, we believe this revised definition provides the relief sought by those commenters that argue that the initial proposed "in operation" definition is too restrictive for those entities dependent upon market conditions for service subscriptions. Additionally, concerns about the warehousing of spectrum are alleviated under Sections 101.65(d) and 101.305(d), which provide for the forfeiture of a license when a licensee fails to transmit operational traffic during any twelve consecutive months after construction is completed.

37. Transmitter Restrictions. Part 21 prohibits the licensing or use of common carrier

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[65] Color bars are a series of contiguous rectangles or patterns, each a different color. They are transmitted primarily for the purpose of testing and adjusting a television signal to ensure that the transmission path is functioning correctly.

[66] See, e.g., American Petroleum Institute Comments at 12; UTC Comments at 16.

[67] Digital Microwave Corporation Comments at 6; Wincomm. Inc. Comments at 6.

[68] Wincomm Comments at 6.

microwave transmitters for non-common carrier communication purposes.[69] In the Notice, we proposed to carry over this restriction regarding the use of licensed microwave facilities to Part 101.[70]

38. Comments. Several parties recommend that the Commission eliminate this rule entirely, advocating that the restriction on non-common carrier operations on Part 21 microwave transmitters provides no benefits to licensees and that the recent record in communication services proceedings supports the lifting of the restriction.[71] For example, UTC urges modification of the corresponding provisions in Part 101 in order to conform with the overall consolidation of the common carrier and private microwave rules and the actual practices of communications common carriers.[72] GTE favors maximum flexibility and supports the amendment of applicable provisions in Part 101.[73] In addition, commenters argue that the concept of dual use is not unique, but one which is in practice and accepted by the Commission, noting that Section 90.185[74] already permits multiple licensing, by two or more eligible persons, of radio transmitting equipment in the private land mobile radio service.[75]

39. Discussion. We are eliminating the restriction that prohibits the use of transmitters used in common carrier stations from being used for non-common carrier purposes. Licensees who operate common carrier stations will be able to provide private services at the same location without having to construct duplicative facilities. This action will promote economic efficiencies by reducing construction and operating costs associated with operating separate facilities. Further, this is consistent with our recent action of eliminating a similar restriction in Part 22 of the rules.[76]

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[69] See Section 21.119.

[70] See proposed Section 101.133(a).

[71] Metropolitan Water District of Southern California Comments at 7-9; Southern Company Comments at 7-9; Montana Power Company Reply Comments at 6.

[72] UTC Comments at 12; See also GTE Reply Comments at 8.

[73] GTE Reply Comments at 8.

[74] We note, pursuant to Section 90.185, licensees must comply with the operating requirements of Section 90.403 of the rules which provides that authorized facilities shall be employed only for permissible purposes.

[75] See Southern Company Reply Comments at 6.

[76] See Part 22 Report and Order at paras. 64-71. In eliminating this restriction in Part 22 the Commission stated:

Advances in technology, such as improved digital transmission techniques and store-

40. Leasing Excess Capacity. Under Part 94, licensees may lease excess capacity to common carriers for their own internal use but not for carrying customer traffic.[77] We proposed to carry this restriction over under Part 101.[78]

41. Comments. A number of commenters note that improved transmission techniques and increased transmission rates have created substantial efficiencies in private systems, thereby leaving them with extra transmission capacity.[79] Rather than letting this capacity remain underutilized, they argue that private operational fixed service licensees should be allowed to lease this capacity to common carriers for their customer traffic. Further, these commenters contend that this offering would not change the status of the private carriers to that of a common carrier, since private licensees would still have the discretion to discriminate in service offerings and contract rates to their common carrier customers.

42. Discussion. In the Further Notice of Proposed Rulemaking in PR Docket No. 83-426,[80] the Commission considered whether it should allow private licensees to lease capacity on their systems to common carriers for the transmission of common carrier communications. The Commission terminated that proceeding, however, because the record had become stale and therefore a decision could not be rendered based on the existing record. We are declining to modify Section 101.135 to allow private users to lease excess capacity to common carriers to carry common carrier traffic. If any person is interested in further pursuing this issue, we remain open to doing so; however, further inquiry would be necessary before action could be taken.

> and-forward technology, have resulted in dramatically increased capacity, thus reducing the need for a transmitter to be devoted on a full-time basis to common carrier uses. Second, licensees providing wide-area service could achieve substantial economies of scale by sharing transmitters when building a regional or nationwide system without diminishing the licensee's quality of service.... Lastly, increased competition in the industry provides an assurance that service to existing customers will not suffer from joint use of transmitters when the carriers are offering distinct services on different channels.

[77] See Section 94.17.

[78] See Section 101.135.

[79] See Central and South West Service, Inc. Comments at 3-6; Entergy Services, Inc. Comments at 4-6; Metropolitan Water District of Southern California Comments at 5-7; The Southern Company Comments at 4-7; UTC Comments at 11-16; CellNet Data Systems Reply Comments at 3-4; Montana Power Company Reply Comments at 4-6; The Southern Company Reply Comments at 3-5.

[80] 5 FCC Rcd 487 (1990).

43. We note, however, that with the increased flexibility we are adopting today, as described in paragraph 36 above, private licensees who desire to carry common carrier traffic as well as internal communications, simply may become a common carrier licensee. Under new Part 101, little administrative burden is imposed on private operational fixed licensees that choose to become common carriers in order to transmit common carrier customer traffic. An existing private operational fixed licensee operating on a frequency(ies) shared with common carriers, i.e., frequencies in the 4, 6, 10, 11, 18, 31, and 38 GHz bands, electing common carrier status would notify the Commission of its change in status by filing a Form 430 noting in Item 6 of the form a change to common carrier status and by filing appropriate tariff information consistent with Part 61 of our rules. After the elimination of the Form 430, licensees changing status should use our license application replacement form. A filing fee will not be required to complete this transaction under Part 101. Private operational fixed licensees operating on exclusive operational fixed service frequencies, i.e., frequencies in the 900 MHz, 2.5, 12, and 23 GHz bands, must either request a waiver to operate as a common carrier on private operational fixed frequencies or file modification applications to use shared frequencies. In this way, our database will accurately reflect those stations that are being used for common carrier purposes.

44. Multiple Address Systems (MAS). In the Notice, we proposed to continue to define Multiple Address Systems as currently found in Part 94 (i.e., each master station must serve at least four remotes).[81]

45. Comments. The Association American of Railroads (AAR) states that the topography along railroad right-of-ways sometimes prevents propagation to four remotes, and, therefore, the definition should be revised so that master stations serving more than one remote would qualify as MAS systems. CellNet supports AAR's proposal and requests that it be made applicable to all licensees. UTC contends AAR's request is beyond the scope of this proceeding and therefore should not be adopted. The proposal, in its view, would be an extremely inefficient use of MAS spectrum. In addition, UTC argues that the unique circumstances cited by AAR can be satisfied by using point-to-point frequencies and that this issue was considered in PR Docket No. 87-5.[82]

46. CellNet also requests that we modify the MAS rules so that its system consisting of a central control system and a number of ancillary or "mini-master" stations, each operating on a separate subfrequency can operate without a waiver.[83] According to CellNet, it has designed an MAS system to operate on multiple subfrequencies within an assigned 12.5 kHz or 25 kHz MAS channel. All of the subfrequencies combined operate within the emission

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[81] See 47 C.F.R. §§ 94.3 and 94.65(a).

[82] Report and Order, PR Docket No. 87-5, 3 FCC Rcd 1564 (1988), Memorandum Opinion and Order, 4 FCC Rcd 2491 (1989).

[83] See ex parte presentation dated, June 12, 1995.

mask limits specified for the MAS spectrum.

47. Discussion. The issue of the number of remote sites that each MAS system must serve was discussed in PR Docket No. 87-5.[84] In that proceeding, the Commission noted that there are many frequencies available for point-to-point operations and only a limited number available for point-to-multipoint operations, and that using MAS frequencies to provide essentially point-to-point communications is spectrally inefficient. The Commission concluded that MAS frequencies are to be used to satisfy point-to-multipoint needs, not communication requirements that can be satisfied by point-to-point frequencies. There is nothing in the record to support changing this policy. Accordingly, we are declining to lower the required number of remotes. Applicants that need to serve fewer locations should apply for point-to-point frequencies.

48. The Notice did not specifically address the issue of MAS systems operating on subfrequencies raised by CellNet. Nevertheless, one of our continuing objectives is to provide more flexible rules, so that new technologies and different system designs can be licensed to provide valuable services to the public. It appears CellNet has found a novel way of employing its MAS spectrum. Further, its system design poses no greater threat of interference to other licensed systems than if it were operated in the "conventional" mode. Finally, no party opposed CellNet's ex parte request. Therefore, we are modifying the rules to permit subfrequency operations in the MAS band.[85] We will not apply the four-remote standard to individual "mini master" stations that operate on subfrequencies. Rather, we will look at the entire "system." This will ensure efficient use of the limited MAS spectrum, while at the same time allowing flexibility to accommodate new technologies and unique systems.

C. Technical Standards

49. Automatic Transmitter Power Control. ATPC is a feature of microwave radios that automatically adjusts transmitter output power based on path fading detected at the far-end receiver(s).[86] In the Emerging Technology proceeding, the Commission stated that ATPC radios are permitted up to a 3 dB increase in power, and encouraged industry groups to explore in greater detail under what circumstances ATPC should be authorized and whether a greater increase in power would be appropriate.[87] To obtain additional information, we requested comments in the Notice on whether to implement TIA's recommendations for

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[84] Report and Order, PR Docket No. 87-5, 3 FCC Rcd 1564 (1988).

[85] We note that multiple subfrequency operation, initiated and an outgrowth of conventional single frequency assignments, will be retroactive to those systems already granted or in operation pursuant to a waiver.

[86] See Section 4.3 of TSB 10-F for a detailed explanation of ATPC.

[87] See Second Report and Order, ET Docket No. 92-9, 8 FCC Rcd 6495, 6519 (1993).

ATPC in Part 101 and what changes, if any, would have to be made in our current licensing scheme.

50. Comments. Parties commenting on this issue all agree that the Commission's rules should be modified to authorize explicitly ATPC.[88] A few commenters, however, raise concerns about the coordination of ATPC systems. Although not opposed to the use of this technology, Pacific Bell, Nevada Bell and Pacific Bell Mobile Services (Pacific Companies) note there is confusion among ATPC users and frequency coordinators over how to use ATPC and the acceptable relationship between the various power levels identified in TIA Bulletin 10. The Pacific Companies propose that ATPC coordinated transmitter power always be set 10 dB below maximum power, or for step-type ATPC transmitters, the step level be used if it is less than 10 dB. In its comments, Comsearch notes that industry is not asking to exceed authorized power or to exceed Equivalent Isotropically Radiated Power (EIRP)[89] limitations. Rather, industry requests permission to operate ATPC transmitters at power lower than the authorized maximum level. Comsearch further states that current rules require power to be maintained near as practical to the input or output level authorized (Section 21.107(c)), or within in 3 dB of authorized EIRP (Section 94.45 (a)(10)). Since ATPC transmitters typically operate at levels 6 to 10 dB below maximum power, such operations may be interpreted as violations of the rules. According to Comsearch, there should be no restriction on operating below authorized power.

51. TIA/NSMA, in reply comments, contend Bulletin 10-F guidelines allay all of the concerns expressed by the Pacific Companies and others. They contend interference problems are unlikely.[90]

52. Discussion. We are adopting rules authorizing ATPC for both common carrier and private operational fixed licensees. The use of ATPC transmitters should improve service reliability without increasing the probability of interference. As we envision the technology, systems normally will operate at power levels substantially less than the maximum power level of the transmitters. When a system experiences a deep fade, the ATPC circuitry will increase the transmitter output power to compensate for the fade. We note that some existing systems currently employ the technology, and to date, the Commission has received no reports of any interference to other operating point-to-point microwave radio systems as a result of ATPC operation.

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[88] See, e.g., American Petroleum Institute Comments at 17; Digital Microwave Corporation Comments at 7; Rural Common Carrier Microwave Coalition Comments at 9-10.

[89] Equivalent Isotropically Radiated Power (EIRP) represents the total power measured at the output of a radio station antenna, and consists of the sum of the output power of the transmitter, any losses between the transmitter output and the antenna, and the antenna gain.

[90] TIA/NSMA Reply Comments at 21.

53. In modifying our rules to specifically authorize the use of ATPC transmitters, we will require applicants to notify potentially affected parties that ATPC transmitters will be used and include on the coordination notice a value for each of the following: maximum transmit power, coordinated transmit power, and nominal transmit power.[91] The inclusion of this information should eliminate the concerns noted by the Pacific Companies. For the purpose of licensing such transmitters, applicants are required to specify the maximum EIRP on their application(s). By using this power level as the authorized power and revising our rules to permit station operation at less than authorized power, we avoid the need to change our databases, license format and application forms.

54. Transmitter Power Limitations. In addition to proposing to merge the applicable transmitter power tables from Parts 21 and 94, we also proposed to eliminate the values for maximum allowable transmitter power, but retain the values for EIRP. We proposed to raise the maximum EIRP to 55 dBW for all point-to-point microwave bands from 4 GHz to 40 GHz, to provide for increased path reliability on long paths and to set a common standard for all bands.

55. Comments. Commenters generally favor establishing a maximum EIRP of 55 dBW for point-to-point microwave bands from 4 GHz to 40 GHz. For example, TIA/NSMA argue that the current 50 dBW limit for some bands adversely affects reliability on long paths, and that this limit could cause frequency congestion in the lower 6 GHz band if a common standard is not established. They contend that a 55 dBW value is better than the current 50 dBW limitation because of the added reliability.[92] E.F. Johnson urges the Commission to review its proposal to determine the extent to which potential interference will increase.[93] Digital Microwave Corporation (DMC) suggests that eliminating the maximum transmitter power level column from table of proposed Section 101.113 will impact our equipment authorization program.[94]

56. In response to E.F. Johnson's concern TIA/NSMA point out that E.F. Johnson did not provide supporting documentation for its view, and note that the Commission's proposal is consistent with US and international standards and is designed to prevent interference. TIA/NSMA also reiterate their earlier comments that current limitations restrict system operators ability to meet required path reliability.

57. Discussion. We are adopting 55 dBW as the maximum EIRP limit for all point-to-point microwave operations for the bands 4 GHz to 40 GHz. The current limitations often

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[91] These terms are define in Bulletin 10-F at Section 4.3.

[92] TIA/NSMA Comments at 40-43.

[93] E.F. Johnson Comments at 3-4.

[94] Digital Microwave Corporation Comments at 6-7.

force engineering compromises in some bands, which deprive the public of optimum levels of service. Raising the maximum power permitted will give users additional flexibility to design microwave networks to overcome adverse terrain and atmospheric conditions without the necessity of requesting a waiver of the current power limitations. Further, there is no evidence that increasing the maximum power limit for these bands as proposed will increase the potential for harmful interference. Generally, it is industry practice to use no more power than essential to provide a quality service. Additionally, each applicant must coordinate its planned frequency usage before filing for an authorization.

58. Contrary to DMC's concerns, the elimination of the maximum transmitter power level column in Section 101.113 does not alter the equipment authorization process. We have previously stated that "[b]ecause of differences in transmitting equipment, the specification which is most appropriate is the one which includes every gain and attenuation in the transmission system, and provides the greatest flexibility in systems design."[95] Although we are eliminating any reference to transmitter power in the table of Section 101.113, we are not deleting the requirement for equipment manufacturers to have their transmitters type accepted or type approved pursuant to Part 2, Subpart J of our rules.

59. Minimum Path Length. The Notice contained an equation for deriving the maximum EIRP permitted over paths shorter than those specified in Section 101.143(a). The intent of the rule is to limit the power available on short paths to that necessary to provide reliable communications. Additionally, this rule would preserve the lower frequency bands for use on longer paths, and would encourage the use of the higher frequency bands whenever possible.

60. Comments. AT&T and TIA/NSMA complain that the Commission's equation sharply reduces the EIRP for paths just under the minimum specified in Section 101.143(a), and therefore would not allow sufficient power for the provision of reliable service. As an example, AT&T notes that if the path length is 17 km or more Section 101.113(c) allows an EIRP of 55 dBW for frequencies between 3.7 GHz and 11.7 GHz. If the path is a 0.1 km less, the equation limits the EIRP to 30 dBW. This significant difference in levels makes the shorter path less reliable and more susceptible to interference. AT&T asserts this problem can be avoided by revising the equation to cause the reduction in maximum EIRP to be more gradual as the path becomes shorter.[96] TIA/NSMA agree with AT&T, but propose another equation.[97]

61. In reply comments, Comsearch agrees with both AT&T and TIA/NSMA's conclusion regarding our proposed formula, but does not agree with either of the suggested

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[95] Report and Order, Gen. Docket Nos. 90-54 and 80-113, 5 FCC Rcd 6410, 6419 (1990).

[96] See AT&T Comments at 6-7.

[97] See TIA/NSMA Comments at 43-44 and Appendix A at A76-A77.

solutions. It recommends adopting a different equation.[98] TIA/NSMA, in their reply comments, support adopting Comsearch's proposed equation. They state that this equation accomplishes the Commission's goals and allows users to install shorter paths without having to reduce power precipitously.

62. Discussion. We have reviewed all of the proposed equations. While each addresses the issue of a sharp drop in the allowable EIRP at distances just below the limit specified in the rules, they all appear to permit EIRP levels above that required for reliable communications at certain distance ranges. For instance, for paths in the range of 5.4 km to about 15 km, the equation supplied by TIA/NSMA yields the better results. Below 5.4 km, a more favorable result is obtained from Comsearch's formula. In reaching a decision on this matter, we are guided by our objective of encouraging the use of higher frequency bands for short paths. We believe Comsearch's equation more closely meets this objective (e.g., the equation encourages licensees to use frequencies in the higher point-to-point microwave bands to satisfy paths of lengths less than 5.4 km). Therefore, we are adopting the Comsearch equation.

63. Frequency Coordination. To promote symmetrical regulatory treatment, we proposed to conform the current frequency coordination procedures and standards to the TIA industry standards, and apply those same coordination procedures and interference standards to all bands for both private and common carrier fixed microwave services.

64. Comments. Commenters overwhelmingly support applying coordination procedures and standards, consistent with TIA recommendations, to all frequency bands for both private and common carrier fixed microwave services.[99] There is some confusion, however, as to how the new rule would apply to certain operations. For example, several parties suggest that frequency coordination be required for entities holding STAs and blanket licenses, and that oral responses to prior coordination notices be confirmed in writing within 48 hours.[100] Additionally, a number of commenters oppose adopting Section 101.103(d)(2)(xii) in its present form.[101] They argue parties should not be permitted to hold growth channels[102] up to six months without demonstrating a need for them if another

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[98] See Comsearch Reply Comments at 5-8.

[99] See, e.g., Bellsouth Comments at 6; American Petroleum Institute Comments at 9.

[100] See, e.g., AT&T Comments at 3-4.

[101] Proposed Section 101.103(d)(2)(xii) provides holder of reserve channel(s) up to six months to apply for an authorization after receipt of a request to release the channel(s).

[102] Growth channels are frequencies that parties clear through the coordination process but hold for future use, i.e., no application(s) is filed immediately to activate the channel(s). It may be many months before the parties have a definitive need for the facilities.